



anemia and cervical carcinoma

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Tumor-associated anemia is ■
common in patients with malignant
disease , including cervical
carcinoma. However , the precise
mechanisms are still not
understood.

Anemia not only may reflect a biologically more aggressive tumor , but anemia may be a mediating factor for resistance to radiotherapy . ■

Material and Methods : during a five-year ■
period the hemoglobin (Hb) levels before
and during treatment from 54 patients
with cervical carcinoma with mean age
52.28 years(range 23-50years) evaluated.
The stage of disease ranged between
stage IIB and stage IVA. All patients were
treated with radiation. Response to
radiation was evaluated by univariate and
multivariate analyses. (chi-square- logistic
regression)

- In 38.9% of these patients the Hb level before treatment was < 12g/dl. 56.8% of the patients with normal Hb level became anemic after radiotherapy

- Response to radiotherapy after 3 months of treatment in the anemic group was 57.1% and in the normal group was 66.7% ($P < 0.48$)

- During treatment all patients were seen weekly and whole blood count , liver and renal function test were taken.

- Response to treatment was assessed by pelvic examination at the first follow-up visit in the 6 weeks after completion of therapy.

- Recurrence of disease in anemic group was seen after 8 months in anemic group and 10.67 months in normal group.

- 3 years disease free survival in the anemic group was 25% and in the normal group was 38%

- overall survival led to this result: in the anemic group 37 months and in the normal group 41 months $P < 0.994$

Conclusions : In patients undergoing radiation for cervical carcinoma , the nadir Hb level is highly predictive of response to treatment , whereas the Hb level after that time of presentation is prognostically not significant . ■

The hemoglobin (Hb) level during or after radiotherapy , rather than the Hb level at the time of presentation , reportedly is strongly predictive for the risk of local failure and impaired disease free and overall survival in patients with carcinoma of the head and neck , the larynx , and the uterine cervix. ■

Table 1 :Hemoglobin level in normal and anemic patients with cervical cancer .

Six week	Five week	Fourth week	Third week	Second week	First week	After treatment	Before treatment	time of Hb level
57.1%	43.8%	50%	47.1%	36.4%	32%	56.8%	38.9%	<12
42.9%	56.2%	50%	52.9%	63.6%	68%	43.2%	61.1%	>12

Table 3: Response rate to radiotherapy in cervical cancer patients

percent	Number of patients	Response to treatment
30.8	24	Not response
5.1	4	Residual disease
64.1	50	Complete response

Thank you

A photograph of a pond filled with lily pads and water lilies. The lily pads are dark green and cover most of the water's surface. Several water lilies are in bloom, showing white and yellow petals. The background is filled with tall, green reeds or grasses. The overall scene is peaceful and natural.